



Review Article

A REVIEW ON: SUBSTANCE ABUSE

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ABSTRACT

Drug Abuse- The focus of this article is to review the recent advances in preventing the misuse of the Controlled Substance like Barbiturates, Benzodiazepines, Cannabis, Cocaine, Methaqualone, Opioids & Alcohol. This Prevention of the Substance Abuse can be understood on the basis of the data provided in article by means of Dual Diagnosis, Signs & Symptoms which enlists the populations that are highly affected and are on a verge of addiction to the drugs. Effect of Substance Abuse on countries overall economy, Legal approaches taken by the various governments, diagnosis of addiction, treatment and side effects are also the areas covered in this article.

Keywords: Addiction, Drug Abuse, Controlled Substances, Dual Diagnosis

INTRODUCTION:

Substance abuse, also known as drug abuse, is a patterned use of a drug in which the user consumes the substance in amounts or with methods which are harmful to themselves or others, and is a form of or others, and is a form of substance-related disorder.

Widely differing definitions of drug abuse are used in public health, medical and criminal justice contexts. In some cases criminal or anti-social behavior occurs when the person is under the influence of a drug, and long term personality changes in individuals may occur as well. In addition to possible physical, social, and psychological harm, use of some drugs may also lead to criminal penalties, although these vary widely depending on the local jurisdiction.

The exact cause of substance abuse is not clear, with theories including one of two: either a genetic disposition which is learned from others, or a habit which if addiction develops, it manifests itself as a chronic debilitating disease.

In 2010 about 5% of people (230 million) used an illicit substance. Of these 27 million have high-risk drug use otherwise known as recurrent drug use causing harm to their health, psychological problems, or social problems or puts them at risk of those dangers. In 2013 drug use disorders resulted in 127,000 deaths up from 53,000 in 1990. The highest number of deaths are from opioid use disorders at 51,000. Cocaine use disorder resulted in 4,300 deaths and amphetamine use disorder resulted in 3,800 deaths. Alcohol use disorders resulted in an additional 139,000 deaths.

Drugs most often associated with this term include:

- Alcohol.
- Barbiturates.
- Benzodiazepines.
- Cannabis.
- Cocaine.
- Methaqualone.
- Opioids.
- Substituted Amphetamines.

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develops, it manifests itself as a chronic debilitating disease.

- Substance Abuse Symptoms: Friends and family may be among the first to recognize the signs of substance abuse. Early recognition increases chances for successful treatment. Giving up past activities such as sports, homework, or hanging out with new friends
- Declining grades
- Aggressiveness and irritability
- Forgetfulness
- Disappearing money or valuables
- Feeling rundown, hopeless, depressed, or even suicidal
- Sounding selfish and not caring about others
- Use of room deodorizers and incense
- Paraphernalia such as baggies, small boxes, pipes, and rolling paper

CLASSIFICATION

Public Health Definitions-

Public health practitioners have attempted to look at substance use from a broader perspective than the individual, emphasizing the role of society, culture, and availability.

The Health Officers Council of British Columbia — in their 2005 policy discussion paper, A Public Health Approach to Drug Control in Canada — has adopted a public health model of psychoactive substance use that challenges the simplistic black-and-white construction of the binary (or complementary) antonyms "use" vs. "abuse". This model explicitly recognizes a spectrum of use, ranging from beneficial use to chronic dependence.

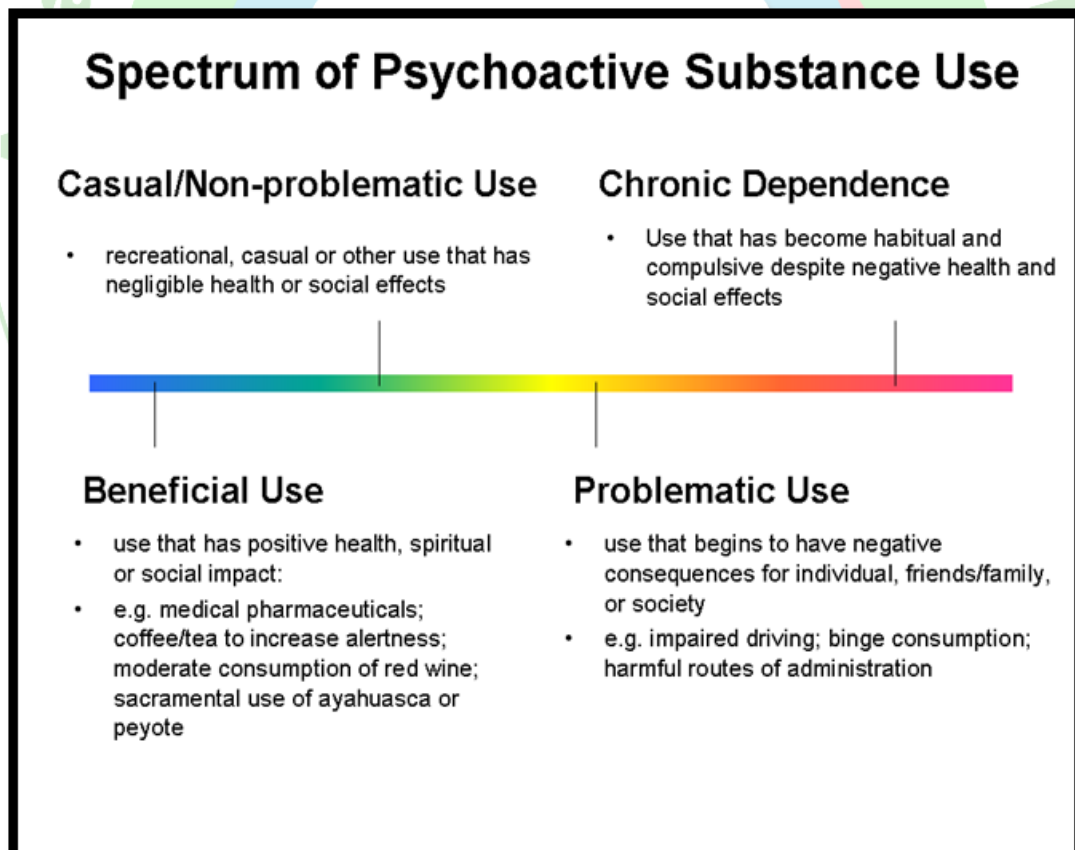


Figure: 1: Spectrum of Psychoactive Substance Use

Drug Misuse-

Drug misuse is a term used commonly when prescription medication with sedative, anxiolytic, analgesic, or stimulant properties

are used for mood alteration or intoxication ignoring the fact that overdose of such medicines have serious adverse effects.

It often involves drug diversion from the individual for whom it was prescribed. Prescription misuse has been defined differently and rather inconsistently based on status of drug prescription, the uses without a prescription, intentional use to achieve intoxicating effects, route of administration, co-ingestion with alcohol, and the presence or absence of dependence symptoms. Chronic use leads to a change in the central nervous system which means the patient has developed tolerance to the medicine that more of the substance is needed in order to produce desired effects. When this happens, any effort to stop or reduce the use of this

substance would cause withdrawal symptoms to occur.

Correlations between drugs usage:

Correlations between usage of 18 legal and illegal drugs: alcohol, amphetamines, amyl nitrite, benzodiazepine, cannabis, chocolate, cocaine, caffeine, crack, ecstasy, heroin, ketamine, legal highs, LSD, methadone, magic mushrooms (MMushrooms), nicotine and volatile substance abuse (VSA). Links indicate correlations with absolute values of Pearson correlation coefficient r above 0.4. Medium, strong, and very strong correlations are indicated by the colour of link.

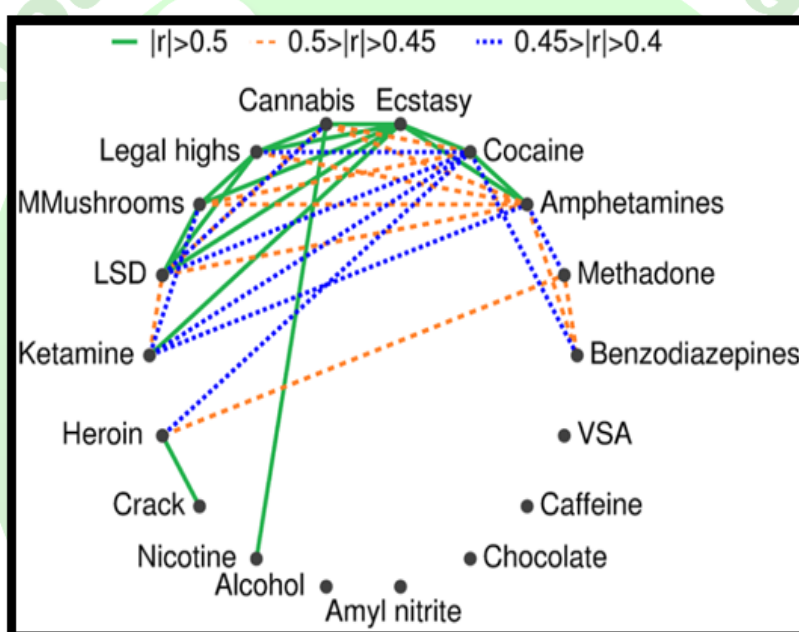


Figure 2: Correlations between drugs usage

SIGNS & SYMPTOMS

There are several different screening tools that have been validated for use with adolescents such as the CRAFFT Screening Test and in adults the CAGE questionnaire.

CRAFFT Screening Test-

The CRAFFT Screening Test is a short clinical assessment tool designed to screen for substance-related risks and problems in adolescents. CRAFFT stands for the key words of the 6 items in the second section of the assessment - Car, Relax, Alone, Forget,

Friends, Trouble. As of 2016, an updated version of the CRAFFT known as the "CRAFFT 2.0" has been released.

The CRAFFT can function as a self-report questionnaire or an interview to be administered by a clinician. Both employ a skip pattern: those whose Part A score is "0" (no use) answer the Car question only of Part B, while those who report any use in Part A also answer Part B's five CRAFFT questions. Each "yes" answer is scored as "1" point and a CRAFFT total score of two or higher identifies "high risk" for a substance use disorder and warrants further assessment.

Screening Adolescents for Alcohol and Drugs

Have you ever drank alcohol (more than a few sips)?
Have you ever smoked marijuana?
Have you ever used any other drug to get high?

All NO **Any YES**

↓ ↓

Ask CAR question only *CRAFFT Screen (below)

C Have you ever ridden in a **CAR** driven by some one (including yourself) who was "high" or had been using alcohol or drugs?

R Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?

A Do you ever use alcohol or drugs while you are by yourself, **ALONE**?

F Do you ever **FORGET** things you did while using alcohol or drugs?

F Do your family or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?

T Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?

*Two or more yes answers on the CRAFFT suggest a serious problem and further assessment should be conducted.
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Referral Information:
Adolescent Substance Abuse Program at Children's Hospital Boston
(617) 355-ASAP (2727)

Figure 3: CRAFFT Screening Test.

CAGE questionnaire-

The CAGE questionnaire, the name of which is an acronym of its four questions, is a widely used screening test for problem drinking and potential alcohol problems. The questionnaire takes less than one minute to administer, and is often used in primary care or other general settings as a quick screening tool rather than as an in-depth interview for those who have alcoholism. The CAGE

questionnaire does not have a specific intended population, and is meant to find those who drink excessively and need treatment. The CAGE questionnaire is reliable and valid; however, it is not valid for diagnosis of other substance use disorders, although somewhat modified versions of the CAGE questionnaire have been frequently implemented for such a purpose.

ALCOHOLISM SCREENING		
"CAGE"		
	DESCRIPTION	QUESTION
C	CONCERN by the person that there is a problem	Have you ever felt that you should CUT down on your drinking?
A	APPARENT to others that there is a problem	Have you ever become ANNOYED by criticisms of your drinking?
G	GRAVE consequences	Have you ever felt GUILTY about your drinking?
E	EVIDENCE of dependence or tolerance	Have you ever had a morning EYE OPENER to get rid of a hangover?

Figure 4: The Cage Questionnaire Can Be Easily Understood And Performed.

DUAL DIAGNOSIS

Dual diagnosis (also called co-occurring disorders, COD) is the condition of suffering from a mental illness and a comorbid substance abuse problem. There is considerable debate surrounding the appropriateness of using a single category for a heterogeneous group of individuals with complex needs and a varied range of problems. The concept can be used broadly, for example depression and alcoholism, or it can be restricted to specify severe mental illness (e.g. psychosis, schizophrenia) and substance misuse disorder (e.g. cannabis abuse), or a person who has a milder mental illness and a drug dependency, such as panic disorder or generalized anxiety disorder and is dependent on opioids. Diagnosing a

primary psychiatric illness in substance abusers is challenging as drug abuse itself often induces psychiatric symptoms, thus making it necessary to differentiate between substance induced and pre-existing mental illness.

Those with co-occurring disorders face complex challenges. They have increased rates of relapse, hospitalization, homelessness, and HIV and hepatitis C infection compared to those with either mental or substance use disorders alone. The cause of co-occurring disorders is unknown, although there are several theories.

- Mental illness.
- Comorbid substance abuse problem.

There are a number of theories that explain the relationship between mental illness and Comorbid substance abuse problem:

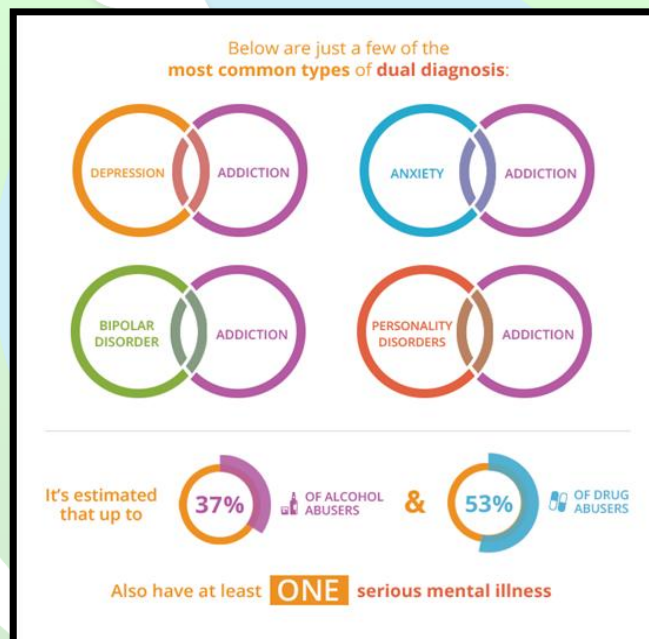


Figure: 5: Most common types of dual diagnosis

TREATMENT

Psychological Treatment

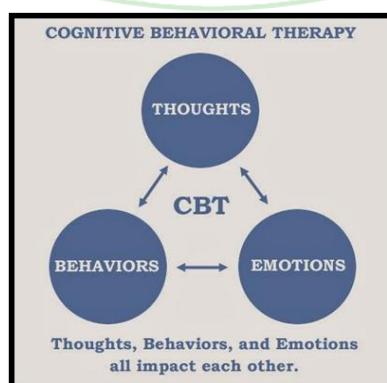


Figure: 6: Cognitive Behavioral Therapy.

In children and adolescents, cognitive behavioral therapy (CBT) and family therapy currently has the most research evidence for the treatment of substance abuse problems. Well-established studies also include ecological family-based treatment and group CBT. These treatments can be administered in a variety of different formats, each of which has varying levels of research support. A few integrated treatment models, which combines parts from various types of treatment, have also been seen as both well-established or probably effective. A study on maternal alcohol and drug use has shown that integrated treatment programs have produced significant results, resulting in higher negative results on toxicology screens. Additionally, brief school-based interventions

have been found to be effective in reducing adolescent alcohol and cannabis use and abuse. Motivational interviewing can also be effective in treating substance use disorder in adolescents.

SOCIETY & CULTURE

Legal approaches- Most governments have designed legislation to criminalize certain types of drug use. These drugs are often called "illegal drugs" but generally what is illegal is their unlicensed production, distribution, and possession. These drugs are also called "controlled substances". Even for simple possession, legal punishment can be quite severe (including the death penalty in some countries).



Figure: 7: Legal approaches used by Governments.

COST-

Policymakers try to understand the relative costs of drug-related interventions. An appropriate drug policy relies on the assessment of drug-related public expenditure based on a classification system where costs are properly identified. Labelled drug-related expenditures are defined as the direct planned spending that reflects the voluntary engagement of the state in the field of illicit drugs. Direct public expenditures explicitly labeled as drug-related can be easily traced back by exhaustively reviewing official accountancy documents such as national budgets and year-end reports. Unlabelled expenditure refers to unplanned spending and is estimated through modeling techniques, based on a top-down budgetary procedure.

Starting from overall aggregated expenditures, this procedure estimates the proportion causally attributable to substance abuse (Unlabelled Drug-related Expenditure = Overall Expenditure × Attributable Proportion).

SPECIAL POPULATIONS

There are several people who are mostly affected by the misuse of drugs.

- Immigrants and refugees.
- Street children.
- Teenagers.
- Musicians.
- Health care professionals.
- Sales professionals.

- Farming, forestry, and fishing professionals.
- Law enforcement professionals.
- Restaurant professionals.

ADDICTIVE PERSONALITY

An addictive personality refers to a particular set of personality traits that make an

individual predisposed to developing addictions. This hypothesis states that there are common elements among people with varying addictions that relates to personality traits. People who are substance dependent are characterized by: a physical or psychological dependency that negatively affects their quality of life.

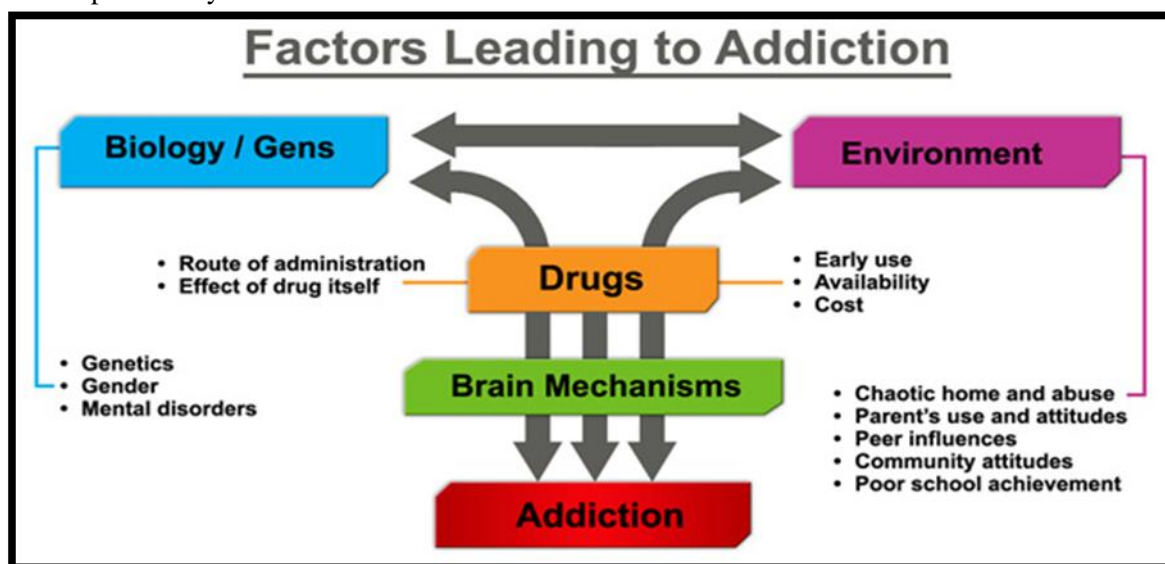


Figure: 8: Factors Leading to Addiction.

BIOPSYCHOSOCIAL CAUSES

While there is debate over whether there is one "addictive personality," there seem to be people who are particularly vulnerable to develop an addiction to certain substances or behaviors. The causes of this addiction proneness, or addictive personality, are best examined through looking at biological, psychological, and environmental (social) factors.

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